

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IL2005/000199

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07K7/08 G01N33/569 C12N15/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HAMASUR B ET AL: "Synthesis and immunologic characterisation of Mycobacterium tuberculosis lipoarabinomannan specific oligosaccharide-protein conjugates" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 17, no. 22, 16 July 1999 (1999-07-16), pages 2853-2861, XP004171718 ISSN: 0264-410X cited in the application abstract page 2854, column 1, paragraph 2 page 2859, column 1, paragraph 2 - column 2 Discussion ----- -/-	1-65

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search

19 May 2005

Date of mailing of the International search report

01/06/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Dumont, E

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CHATTERJEE D ET AL: "LIPOARABINOMANNAN OF MYCOBACTERIUM-TUBERCULOSIS CAPPING WITH MANNOSYL RESIDUES IN SOME STRAINS" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 267, no. 9, 1992, pages 6234-6239, XP002328580 ISSN: 0021-9258 cited in the application abstract Introduction page 6239, column 2; figure 3 -----	1-65
A	WANG LIN-FA ET AL: "Epitope identification and discovery using phage display libraries: Applications in vaccine development and diagnostics." CURRENT DRUG TARGETS, vol. 5, no. 1, January 2004 (2004-01), pages 1-15, XP009047802 ISSN: 1389-4501 abstract page 6; figure 4 page 7, paragraph 3.2 - page 9, paragraph 3.4 -----	1-65
A	PINCUS S ET AL: "Peptides that mimic the group B streptococcal type III capsular polysaccharide antigen" JOURNAL OF IMMUNOLOGY, THE WILLIAMS AND WILKINS CO. BALTIMORE, US, vol. 160, no. 1, 1998, pages 293-298, XP002102148 ISSN: 0022-1767 abstract page 294, column 1, last paragraph page 297, column 1, last paragraph -----	1-65

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IP14 Rec'd PCT/PTO 18 AUG 2006

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Although claims 51-65 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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Continuation of Box II.1

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

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Continuation of Box II.2

Claims Nos.: -

Present claims 1-10, 13-24, 27-34, 37-44, 47-58, 61-65 relate to an amino acid molecule comprising a peptide defined by reference to desirable characteristics or properties, namely the capacity of binding to ManLAM binding antibodies, as well as the capacity of eliciting, upon immunization of a subject, production of ManLAM antibodies. The claims cover all peptides having this characteristics or properties, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such peptides. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the peptides by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the peptides with the SEQ ID NOs. 1-5 represented in Table 1 (pages 9 and 29 of the description) and in claim 11.

Present claims 11, 12, 25, 26, 35, 36, 45, 46, 59 and 60 relate to an amino acid molecule comprising an extremely large number of possible peptides, namely "immunologic modifications" of SEQ ID Nos 1-5. In fact, the claims contain so many options that a lack of clarity (and conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear (and concise), namely those parts relating to the peptides with the SEQ ID NOs. 1-5 represented in Table 1 (pages 9 and 29 of the description) and in claim 11.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 51-65 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.